

### Epidemiology

- Severe coughing illness caused by *Bordetella pertussis*
- Highly contagious
- Spread by contact with aerosolized droplets produced by coughing
- Incubation period from 6-21 days, usually 7-10 days

### Clinical Presentation

- Afebrile
- Patient asymptomatic and looks well in between coughing spells
- Starts as runny nose and slight cough
- Catarrhal stage: Cough worsens over 1-2 weeks
- Paroxysmal stage: Several weeks of severe paroxysms of coughing, often severe enough to cause color change, post-tussive emesis, or apnea
- Convalescent stage: Coughing decreases over weeks to months.

### Differential Diagnosis

- Respiratory infections caused by *Mycoplasma*, viruses, or bacteria. However, escalating cough in an afebrile, nontoxic patient is most likely pertussis

### Laboratory

- Nasopharyngeal swab for pertussis culture
- Nasopharyngeal swab for DFA
- Young children often have an extremely elevated blood WBC count with lymphocytosis

### Infection control

- Infectious for 5 days after onset of antibiotics
- If not treated, infectious for 3 weeks after onset of symptoms

### Treatment & Prophylaxis

- Antibiotic choices are the same for both treatment and prophylaxis
- Erythromycin (14 days), or clarithromycin (7 days), or azithromycin (5 days)
- Alternate if above not tolerated: Trimethoprim-sulfamethoxazole for 14 days
- Erythromycin reduces the severity and duration of disease, even when started during the paroxysmal phase.

### Vaccine Recommendations

- Consider an accelerated schedule for the first three pertussis vaccines for infants during outbreaks: the first dose at 6 weeks with a minimal interval of 4 weeks for the next two doses (e.g. 2<sup>nd</sup> dose at 10 weeks and 3<sup>rd</sup> dose at 14 weeks)
- Vaccinating adolescents ages 10-18 years old may decrease community spread and further protect infants

### Notify

- Your local health department concerning suspected and confirmed cases

### For More Information or Questions

- Call Arizona Department of Health Services (ADHS) Office of Infectious Disease Services at (602) 364-4562

Go to the ADHS website at:

<http://www.azdhs.gov/phs/oids/epi/pertussis/index.htm>

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